

to remove. In the author's two series of 222 cases, he reports finding pus in 65, or 28 per cent. After a wide experience before 1893, with drainage, and practically not having used it since then, the author believes that patients, as a rule, do very much better if drainage is not used. Not only have the immediate results been better, but the ultimate results, such as the occurrence of hernia and intestinal adhesions, have been avoided.

The Treatment of Abdominal Aortic Aneurism by a Preliminary Exploratory Celiotomy and Peritoneal Exclusion of the Sac, followed at a Later Sitting by Wiring and Electrolysis.—MATAS (*American Medicine*, June 29, 1901) states that of the fifteen reported cases treated by this method all but three have died. A careful examination of the histories of these three cured cases tends to bear out the conclusion that aneurisms which originated low down on the abdominal aortic tract, especially below the superior mesenteric, all other conditions being equal, are much more favorable for attack by this method than those seated higher up in the celiac area. The objections to this method of treatment are: 1. The cure of the aneurism may lead to the death of the patient by obliterating the orifice of important visceral arteries. This is most likely to occur in dealing with aneurisms of the upper or celiac division of the abdominal aortic tract—*i. e.*, in about 50 per cent. of the cases. 2. Secondary rupture of the sac from the strain put upon weak portions of the sac in multilocular aneurisms after partial coagulation of the contents has taken place is particularly likely to occur in subjects of general endarteritis with atheroma. 3. Escape of wire through a large aneurismal orifice into the lumen of the aorta, with migration upward into the heart, leading to perforation, traumatic endarteritis, endocarditis, with the formation of secondary thrombi and emboli. 4. Danger of perforating the sac by stiff wire or by overcrowding the sac with too much wire. 5. Danger of extension of clot from the coagulum in the aneurism to the main artery, leading to fatal blockade at the bifurcation, with gangrene of the lower extremities. 6. Danger of rupture of sac from sudden withdrawal of abdominal support and displacement of adherent organs in the course of the exploratory laparotomy. 7. Danger of mistaking a fusiform for a sacciform aneurism. 8. Danger from emboli and thrombi following incomplete coagulation of the blood in the sac (a very rare and practically unknown occurrence in abdominal cases). 9. Danger of shock. 10. Danger of sepsis. In the presence of this formidable array of dangers which beset the application of this method, one must ask what are the conditions, if any, which are favorable to its successful application? Theoretically possible, but clinically rare, are the following conditions: (1) The aneurism should be saccular; (2) it should be unilocular; (3) it should be provided with fairly strong, resisting walls; (4) the patient should be young or middle-aged, fairly healthy, and free from general endarteritis and atheroma; (5) the aneurismal orifice communicating the sac with the lumen of the parent artery should be small; (6) the aneurismal sac should spring from the lower, inframesenteric division of the artery, preferably between the origin of the superior mesenteric and the bifurcation; (7) if given off from the celiac region the orifice should be situated on the posterior or lateral wall of the aorta. With these ideal conditions, and with a perfect

technique, the chances of permanent cure would be immensely increased and the operation could be undertaken with great probability, almost certainty, of success. But as the most important of these conditions can never be ascertained *intra vitam*, and one is thus unable to differentiate clinically between the favorable and the unfavorable cases, the author is forced to conclude that the Moore-Corradi method as at present applied, and in spite of the undoubted improvements that have been made in its technique, is a most dangerous procedure, essentially lacking in the elements of that scientific precision and knowledge of avoidable perils which are necessary to elevate it out of the plane of empiricism and surgical experimentation. Its chief recommendation now rests upon the naked fact that in three out of fifteen recorded cases (20 per cent.), it has actually arrested the progress of aneurisms and saved life. Apart from this clinical fact, it can claim but little else in its favor except that in the presence of almost certain death from the disease when allowed to follow its natural evolution, even a remote possibility of survival by operation is better than no chance at all.

The author states in conclusion that in the light of present experience we should restrict our recommendation of the combined method to that small group of comparatively favorable cases in which the aneurisms are confined to the inframesenteric portion of the aorta, and then only after other safer methods of treatment had been tried and failed. In aneurisms situated in the upper part of the aortic tract, the boundaries of which cannot be even approximately determined, the author regards this procedure in the light of a pure experiment—a veritable surgical adventure—which would be justified solely by the imminent danger of death from rapid progress of the disease which threatened rupture of the sac, and associated with great suffering. Even then the operation could not be recommended, but should be undertaken solely at the urgent solicitation of the patient after a thorough understanding that the chances would be no less than 70 per cent. against his recovery from the operation.

A Report of Twenty four Operations Performed during Spinal Analgesia.—BAINBRIDGE (*Medical News*, May 4, 1901), after reporting in detail the results of twenty-four cases, states that the following conclusions are made from fifty cases, which include those just noted: 1. Cocaine is far more satisfactory than eucaine. The latter is less potent, more evanescent, the areas of analgesia are frequently "patchy," having the pain sense retained all around them and not being so complete below definite levels. The cocaine produces no more unpleasant after-effects than eucaine, and is decidedly more reliable. 2. Analgesia to the level of the diaphragm can be depended upon in all cases where a moderate dose of a potent solution of cocaine has been introduced by lumbar puncture. In some the analgesia is sufficient for operation on the upper extremities. 3. Complete analgesia, including the eyes, mouth, and throat, has occurred. It does not entail more severe after-effects than when the lower extremities only are involved. 4. The preparation of the patient as for a general anæsthetic diminishes all the unpleasant effects of cocaine and eucaine, and often prevents them altogether. 5. By moderate doses of bromides before the injection the initial vomiting is frequently avoided and the liability of headache lessened.